9. Systems of non-verbal predication

9.0. Introduction

A number of general patterns that languages may use to split up the area of non-verbal predication emerge from the data presented in chapter 8. In this chapter I will show that these patterns correlate to a high degree with other features of the languages concerned, in particular (i) their parts-of-speech system, with its implications for the degree of predicability of non-verbal predication types, and (ii) the zero strategy they adopt, if any. In 9.1 I first discuss the predominant expression patterns one by one, mentioning in each case the correlations with the features mentioned above, and then try to arrive at some generalizations concerning these correlations.

9.1. Expression patterns

9.1.0. Introduction

In the preceding chapter I looked at the distribution of individual expression formats across languages and across predication types without paying attention to the fact that in several languages further subdivisions can be made within the expression formats making use of a copula, since these languages make use of more than one such morpheme.

In this section I will incorporate this information by looking at how languages split up the area of non-verbal predication in terms of the (combinations of) morphological realizations of the different types of non-verbal predication, where by a morphological realization I understand (i) a copula, (ii) a zero-1 construction, or (iii) a zero-2 construction. Table 43 lists the morphological realizations of the different types of non-verbal predication in the languages of the sample. In this table copulas are printed in italics, a - indicates that a predication type is non-predicable in the language under consideration, ø1 is a zero-1 construction, and ø2 a zero-2 construction.

On the basis of the information in Table 43 the languages of the sample can be arranged in groups using roughly the same kind of partitioning within their system of non-verbal predication. The partitionings I am most interested in are those defined by what may be called *global splits*. Within each of the partitionings further *local splits* may be encountered, but these will be shown to be of less interest.

Table 43. Expression formats used in the languages of the sample

Language	Ascriptive Presentative Existential	Locative	Possessive	Non-presentative Locative
!Xũ	*gè*	*gè/ø2*	-	*gè/ø2*
Abkhaz	*-zaa/ø1*	*-zaa/ø1*	-	*-zaa/ø1*
Arabic, Egyptian	*kan/ø1*	*kan/ø1*	-	*kan/ø1*
Babungo	*lúu/ø2*	*lúu/ø2*	-	*lúu/ø2*
Bambara	*bè*	*bè*	-	*bè*
Basque	*izan*	*izan/egon*	-	*izan/egon*
Burushaski	*ba*	*ba*	*ba/-*	*ba*
Chinese, Mandarin	*you*	*you*	-	*zai*
Chukchee	*tva*	*tva*	-	*tva*
Dutch	*zijn/-*	*zijn/-*	-	*zijn/-*
Gilyak		*p'i*	-	*p'i*
Guaraní	*í*	*í*	-	*í*
Hausa	-	-	-	*nà/kè*
Hixkaryana	*exe*	*exe*	-	*exe/ø2*
Hungarian	*van*	*van*	-	*van*
Jamaican Creole	*de*	*de/ø2*	-	*de/ø2*
Ket	*ûse*	*ûse*	-	ø1
Krongo	*áfĩidi*	*áfĩ*	-	*áfĩ*
Lango	*tié*	*tié*	-	*tié*
Mam	*(a)t*	*(a)t*	-	*(a)t*
Miao	*muɑ*	*muɑ*	-	*ñáo*
Nahali	*tha*		-	*tha*
Nasioi	*onomaun*	*onomaun*	-	*onomaun*
Navaho	*-/honishłǫ́*	*-/honishłǫ́*	-	*honishłǫ́*
Ngalakan	-	-	-	*-/ø1*
Ngiyambaa	-	*-/ga/ø2*	-	*-/ga/ø2*
Pipil	*nemi*	*nemi*	-	*nemi*
Quechua, Imbabura	*tiya*	*tiya*	-	*ka/ø2*
Sumerian	*ĝá*	*ĝá*	-	*ĝá*
Tagálog	-	-	-	ø2
Tamil	*untu*	*untu/iru*	-	*iru/ø2*
Thai	-	-	-	*jùu*
Turkish	*var/ol*	*var/ol*	-	*i/ol/ø1*
Vietnamese	*cò*	*cò/ø2*	-	*o'/ø2*
West Greenlandic	-	-	-	*it/ø2*
Yagaria	-	-	-	-
Yessan-Mayo	*-/ti*		-	*ti/ø2*

Table 43. Expression formats used in the languages of the sample (continued)

Ascriptive (cont.) Non-presentative (cont.) Adjectival	Nom.	Poss.	Equative Indefinite	Definite	Language
-	-	-	*o/ø2*	*o/ø2*	!Xũ
ø1/*-zaa*	-	-	ø1/*-zaa*	-	Abkhaz
kan/ø1		-	*kan/ø1*	*kan/ø1/huwa*	Arabic, Egyptian
lúu/-	-	-	*lúu*	*lúu*	Babungo
ka	-	-	*do/ye/ye...ye*	*do/ye/ye...ye*	Bambara
izan/egon	*izan*	-	*izan*	*izan*	Basque
------- *ba* ------		*ba*		*ba*	Burushaski
-	-	-	*ø2/shì*	*ø2/shì*	Chinese, Mandarin
ø2	ø2	ø2	ø2	ø2	Chukchee
zijn	*zijn*	*zijn*	*zijn*	*zijn*	Dutch
irr		-	*ø2/mu*	*ø2/mu*	Gilyak
ø1		-		ø2	Guaraní
irr	-	-	*nè/cè/kè*	*nè/cè/kè*	Hausa
irr		-	ø2	ø2	Hixkaryana
van/ø1	-	-	*van/ø1*	*van/ø1*	Hungarian
ø1	*a*	*a*	*a*	*a*	Jamaican Creole
------- ø1 -------		ø1	ø1	ø1	Ket
irr			*áa-*		Krongo
ø1/*bèdò*	-	-	ø1/*bèdò*	ø1/*bèdò/en*	Lango
ø1			ø1	ø1	Mam
irr		-	*ʐɑu*	*ʐɑu*	Miao
ka		*ka*			Nahali
ø1		-	ø1	ø1	Nasioi
irr		-	*'ánísht'é/nishłį́*	*'ánísht'é/nishłį́*	Navaho
ø1/*-me*	ø1/*-me*	ø1/*-me*	ø1/*-me*/ø2	ø1/-me/ø2	Ngalakan
----- ø2/*ga* -----		ø2/*ga*	ø2/*ga*	ø2/*ga*	Ngiyambaa
ø1		-	ø1	ø1	Pipil
----- ø2/*ka* -----		ø2/*ka*	ø2/*ka*	ø2/*ka*	Quechua, Imbabura
me		*me*	*me*	*me*	Sumerian
------- ø2 -------		ø2	ø2	ø2	Tagálog
-	-	-	ø2	ø2	Tamil
irr		-	ø2/*pen/khi*	ø2/*pen/khi*	Thai
----- ø1/*i/ol* ----		ø1/*i/ol*	ø1/*i/ol*	ø1/*i/ol*	Turkish
irr	-	-	ø2/*là*	ø2/*là*	Vietnamese
irr	-	-	*-u/tassa(-u)*	*-u/tassa(-u)*	West Greenlandic
-	-	-	ø1	ø1	Yagaria
ti/ø2	*ti/ø2*	-	ø2	ø2	Yessan-Mayo

It should be noted that the particular partitionings listed in the following sections have been explicitly drawn up with an eye to possible correlations between the splits within the system of non-verbal predication and any of the parameters mentioned in the introduction. Other, less interesting, groupings than the ones presented here could have been arrived at by assigning more weight to what are considered local splits in what follows.

There are three general principles that I have followed, however, in drawing up the present classification. First, the groupings that are given are maximally global, i.e. the splitting is binary. Second, every language has been assigned to one group only. Third, for the classification of the languages of the sample only the expression of predicable predication types has been taken into account.

9.1.1. Relational versus non-relational

Several languages in the sample make a basic distinction between predications based on relational predicates on the one hand, and those based on non-relational ones on the other, where the latter class comprises both bare and referential predicates. Figure 43 represents this particular subdivision.

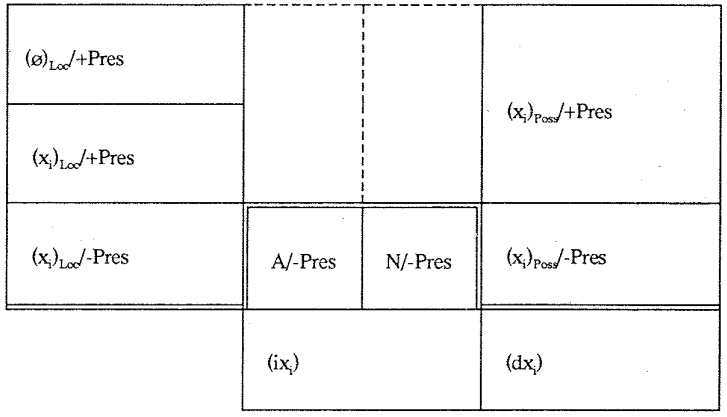

Figure 43. Relational versus non-relational: Bambara, Guaraní, Hungarian, Lango, Mam, Nasioi, Pipil.

The picture presented in Figure 43 was first presented in 6.2, where it represented degrees of predicability. In chapter 8 the hierarchies on which it is based, the predicate and predication hierarchies, were shown to be relevant with respect to the selection of expression formats as well. In this chapter it will be shown to be appropriate for the general representation of systems of non-verbal predication. Some further preliminary remarks are in order with respect to Figure 43, illustrating the general points made in the introduction to this section.

First, the languages mentioned here may make further local splits within one of the two subareas. For instance, Bambara makes a further distinction between predications based on bare and referential predicates, and Lango has a copula that is used in identifying predications only, as can be seen in Table 43.[1]

Second, not all predication types listed in Figure 43 are predicable in all of the languages mentioned, so that the generalization holds only for predicable predication types within the languages concerned only. Thus, neither of the possessive predication types is predicable in Guaraní, and in Hungarian predications based on bare nominal predicates are non-predicable as well. For a language to qualify as belonging to the type under discussion here, predications based on adjectival predicates should be predicable, however, since in those cases in which they are not the distinction between relational and non-relational predicates no longer makes sense: in those languages the relevant contrast is that between localizing and equative predications (see 9.1.2).

Third, in establishing the subdivisions both single morphological realizations and combinations of morphological realizations have been taken into account. In Hungarian, for instance, relational predicates combine with the verbal copula *van* in all circumstances, whereas non-relational predicates combine with this same verbal copula in non-present tenses only, the alternative in the present tense being a zero-1 strategy (see Figure 44). Thus, although Hungarian uses the same verbal copula in both sets of predications, it does make a difference between the two sets in terms of the combination of morphological realizations of the predication types.

It comes as no surprise that most of the languages exhibiting the relational versus non-relational subdivision in their system of non-verbal predication are languages that use the zero-1 strategy. In discussing this strategy I showed that the application of this strategy is governed by a predicativity hierarchy, repeated here as (1):

1. Interestingly, neither of the languages exhibiting the relational versus non-relational pattern makes a further local split within the subarea of predications based on a relational predicate.

(1) Predicativity hierarchy

1		2		3		4
Bare	>	Referential	>	Relational		
				Non-presentative	>	Presentative

Languages in which the zero-1 strategy is restricted to either bare predicates (cut-off point 1) or bare and referential predicates (cut-off point 2) show a major split between relational and non-relational predicates. Note that this is partly a result of the fact that there are no languages in which one (combination of) morphological realization(s) is used for bare predicates, and another for referential *and* relational predicates. The relevance of this latter point will be taken up in 9.3.

A sketch of a zero-1 language exhibiting the relational versus non-relational pattern is given in Figure 44. In this figure copulas are given in italics, and a - indicates that the predication type involved is non-predicable.

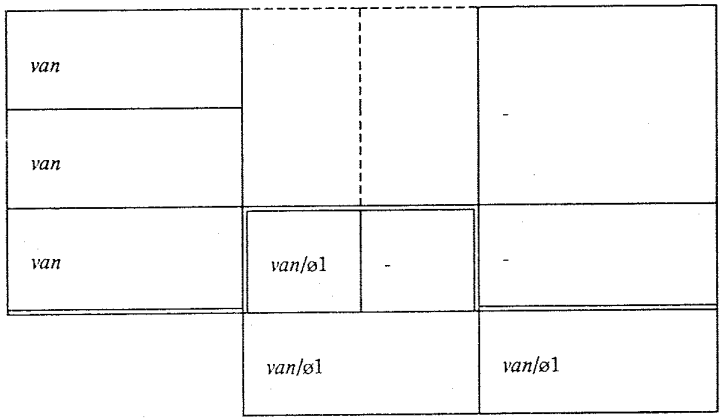

Figure 44. Sketch: Hungarian

Not all zero-1 languages show the subdivision discussed here. Some of these languages allow the zero-1 strategy to be used not only with bare and referential predicates, but with relational ones as well, a possibility predicted by the predicativity hierarchy in (1) (cut-off points 3 and 4). These languages will show up below in 9.1.3.

There is one language exhibiting the relational versus non-relational pattern that does not use the zero-1 strategy. In Bambara separate copulas are used for bare, referential, and relational predicates, as shown in Figure 45.

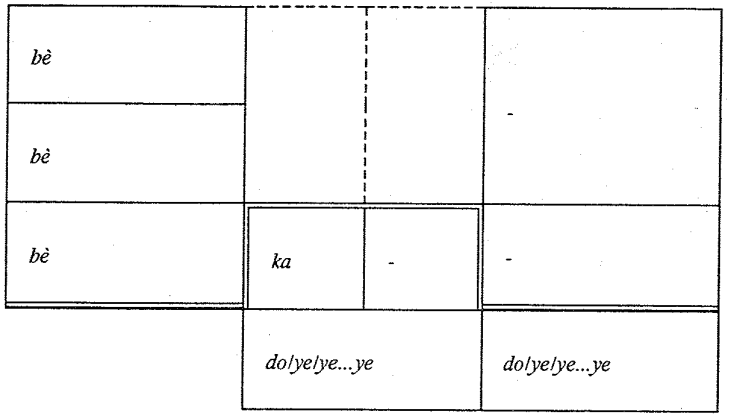

Figure 45. Sketch: Bambara

All languages having the relational versus non-relational pattern are neither extremely flexible nor extremely rigid. In rigid languages predications based on bare predicates are non-predicable, which excludes their organizing their system of non-verbal predication along the lines sketched here. In flexible languages there is little need to give relational predicates a treatment different from the one used for bare and referential predicates.

9.1.2. Equative versus localizing

A large group of languages makes a basic distinction between predications based on referential and relational predicates, while predications based on bare predicates are non-predicable. Since the non-predicability of predications based on bare predicates implies the non-predicability of those based on possessive predicates (see 6.1.1), these languages do in fact make a basic distinction between equative and localizing predications, as indicated in Figure 46.

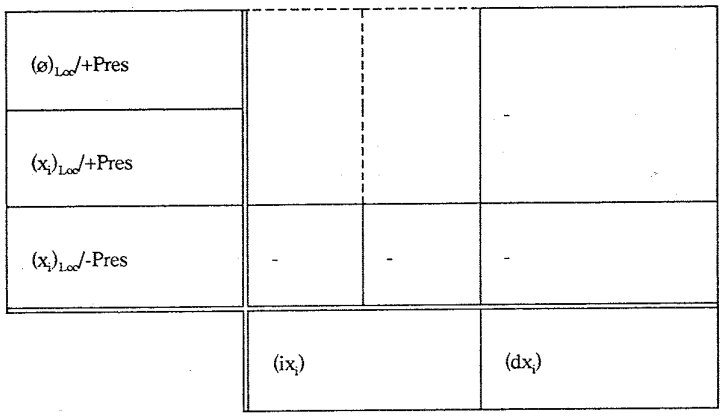

Figure 46. Equative versus localizing: !Xũ, Mandarin Chinese, Gilyak, Hausa, Hixkaryana, Krongo, Miao, Navaho, Tamil, Thai, Vietnamese, West Greenlandic, Yagaria.

Again, there may be further subdivisions within each of the sub-areas. For instance, within the area of localizing predications Mandarin Chinese makes a distinction between presentative and non-presentative ones. !Xũ gives a different treatment to existential and non-existential predications. In Yagaria equative predications are the only predicable ones.

All languages exhibiting the pattern given in Figure 46 either lack a class of adjectival predicates or have a closed class of adjectival predicates that cannot be used predicatively, that is, they are of the rigid type, which is also reflected in the non-predicability of predications based on bare nominal and possessive predicates. A typical example is Tamil, represented in Figure 47. Thus, in these languages equative and localizing predications each have their own (combination of) morphological realization(s), the remaining predication types being non-predicable. The correlation between a language not having a class of adjectives that can be used predicatively and its having separate equative and localizing predication types is so strong that all languages with the first property also have the second one. An explanation for this will be offered in 9.2.1.

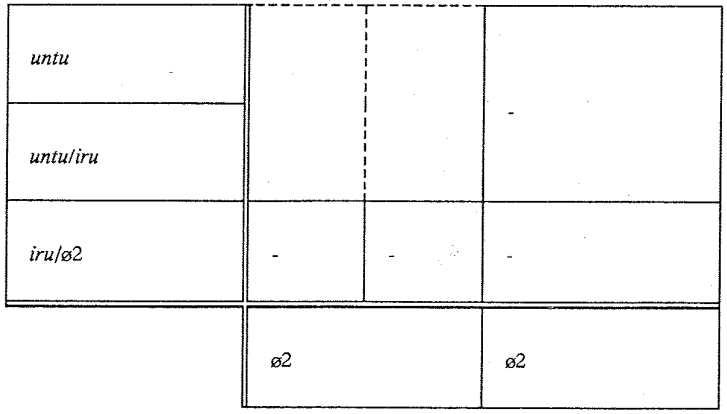

Figure 47. Sketch: Tamil

A common property of the languages having the equative/localizing pattern is that, if they use a zero-strategy, it is of the zero-2 type. Again, this is not surprising, as a closer inspection of the hierarchy governing the use of the zero-2 strategy reveals:

(2) Predication hierarchy

1		2		3	4
Equative	>	Ascriptive			
		Non-presentative	>	Presentative	
				Non-existential	> Existential

The hierarchy predicts that there are languages that use the zero-2 strategy in equative predications only (cut-off point 1), in which case they cannot but belong to the type discussed here as long as the predicative use of predications based on bare predicates is disallowed.

9.1.3. Presentative versus non-presentative

The third type of distribution of expression formats is that in which there is a basic distinction between presentative and non-presentative predications, as represented in Figure 48. An example of this subtype is given in Figure 49.

$(ø)_{Loc}$/+Pres			$(x_i)_{Poss}$/+Pres
$(x_i)_{Loc}$/+Pres			
$(x_i)_{Loc}$/-Pres	A/-Pres	N/-Pres	$(x_i)_{Poss}$/-Pres
	(ix_i)		(dx_i)

Figure 48. Presentative versus non-presentative: Ket, Imbabura Quechua, Turkish.

A common property of the languages with this system is that they are of the flexible type, or, more exactly, that they have a single class of predicates in which the functions of noun and adjective are combined. It is this flexibility that enables them to use a single expression format for predications based on bare, referential, and relational predicates. The reason for employing different expression formats for presentative and non-presentative predications might be that this is the only way in which presentativity can be signalled in these languages.

Clark (1978: 91) shows that the indefiniteness[2] of the subject term in presentative constructions is indicated in one of two ways: "Some languages rely on word order and others on the use of definiteness markers". She furthermore found that in many languages "word order itself is the main indicator of definiteness where there is no definite or indefinite article available".

Common to the languages exhibiting the presentative/non-presentative pattern is that they do not have articles, or do not make obligatory use of articles on the one hand, and either have rather rigid or rather free word order. Thus, the difference between presentative and non-presentative predications cannot be signalled by articles, nor by specialized presentative and non-presentative word order patterns.

2. In terms of the analysis of these constructions given in chapter 5, it is the presentative nature of the subject term rather than its indefiniteness that is at stake. However, in most cases referents that are introduced into the discourse will be indefinite.

The only remaining option is to distinguish between the two by means of different expression formats.

var/ol			-
var/ol			
i/ol/ø1	*i/ol/ø1*	*i/ol/ø1*	*i/ol/ø1*
	i/ol/ø1		*i/ol/ø1*

Figure 49. Sketch: Turkish.

Both zero-1 and zero-2 languages can be found having this system, as is predicted by the two hierarchies governing the use of the zero-1 and zero-2 construction, repeated in (3) and (4):

(3) Predicativity hierarchy

1		2		3		4
Bare	>	Referential	>	Relational		
				Non-presentative	>	Presentative

(4) Predication hierarchy

1		2		3		4
Equative	>	Ascriptive				
		Non-presentative	>	Presentative		
				Non-existential	>	Existential

The predicativity hierarchy predicts that there are languages that use a zero-1 strategy in non-presentative predications, but not in presentative ones (cut-off point

3). The predication hierarchy predicts the same possibility for the zero-2 strategy (cut-off point 2).

9.1.4. All alike

There are a several languages in the sample in which a single expression format is used in all predication types. This type of distribution of expression formats is represented in Figure 50, and illustrated in Figure 51.

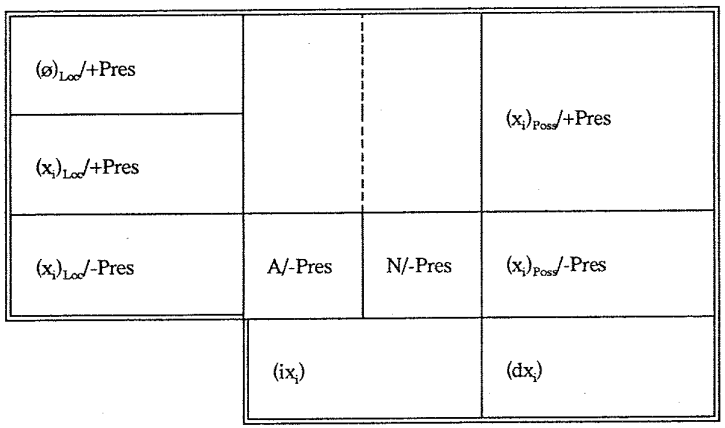

Figure 50. All alike: Abkhaz, Burushaski, Dutch, Ngiyambaa, Tagálog.

As will be shown in 10.1, three of the five languages listed here seem to be under pressure to innovate their copular system (Abkhaz, Dutch, Ngiyambaa). Other languages which have undergone such an innovation show the localizing versus non-localizing pattern to be discussed below. The remaining languages, which show no signs of being under such a pressure, Burushashki and Tagálog, are of the same type as those treated in the previous section: they are flexible languages to the extent that they have a single class of predicates that can be used in nominal and adjectival function.

In Burushaski a further subdivision between presentative and non-presentative predications does not appear to be necessary, since presentativity may be signalled by the presence of an indefiniteness marker. In Tagálog presentativity cannot be

signalled by articles or word order, but this does not contradict the suggestion put forward in the previous section, since in this language presentative predications are non-predicable and expressed by means of alternative expression formats. Thus, there is a clear demarcation line between presentative and non-presentative predications, even if Tagálog, as far as its predicable predication types are concerned, is of the all-alike type.

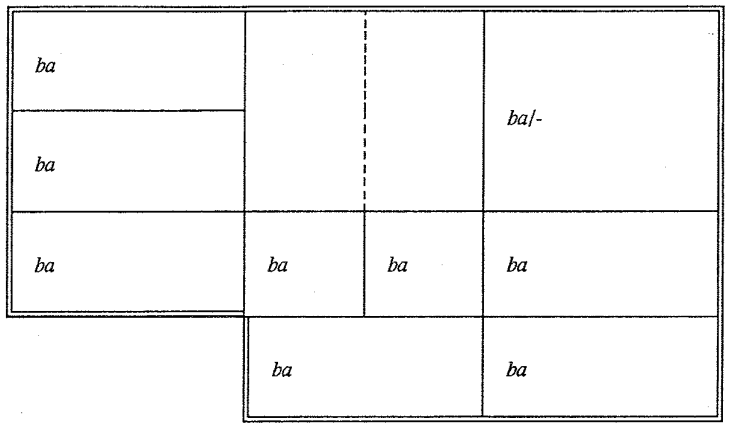

Figure 51. Sketch: Burushaski

9.1.5. Localizing versus non-localizing

In several languages the localizing predication types receive a treatment that is different from all other predication types. Chukchee, Jamaican Creole, Nahali, and Sumerian each have a separate copula for localizing predications. In Ngalakan a predicativizing copula used in other predication types is disallowed in localizing predications. Babungo allows a zero-2 strategy in localizing predications only. This kind of system is represented in Figure 52. By way of example, the Jamaican Creole system of non-verbal predication is given in Figure 53.

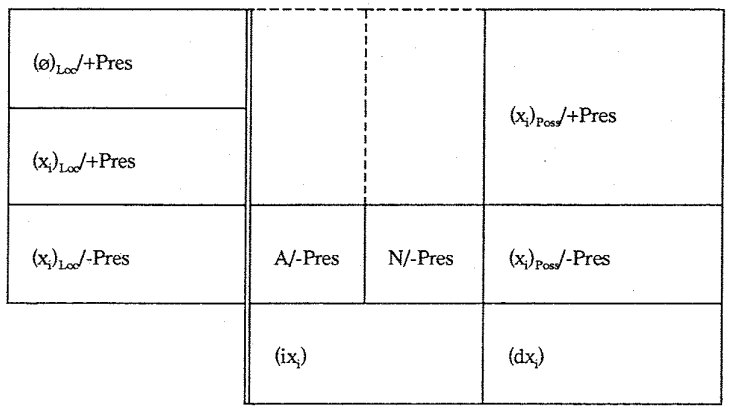

Figure 52. Localizing versus non-localizing: Babungo, Chukchee, Jamaican Creole, Nahali, Ngalakan, Sumerian.

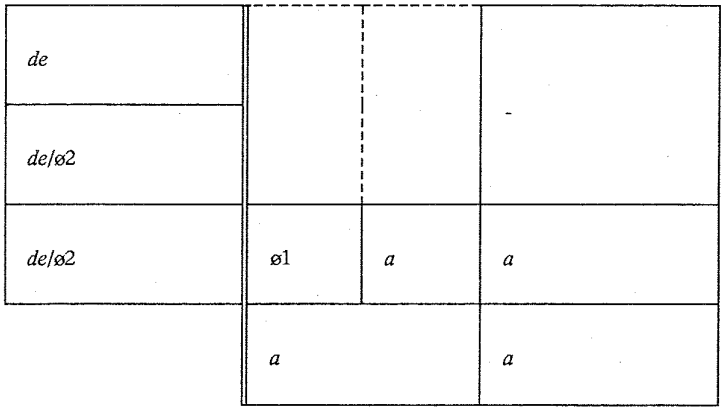

Figure 53. Sketch: Jamaican Creole

It is precisely the languages using this type of distribution, together with some of the all-alike type, that occurred as (partial) counterexamples to the hierarchies describing degrees of predicability and the use of the zero-strategies. This pattern is best understood from a diachronic perspective, which will be provided in 10.1. There I will argue that the separate treatment given to localizing predications represents the first stage in a proces of innovation of the copular system of a language. All languages listed here are neither extremely flexible nor extremely rigid. It is particularly in this group of languages that this type of innovation takes place.

Note that, since in many languages possessive predications are non-predicable, many of the languages listed in 9.1.1 as exhibiting the relational/non-relational pattern could have been classified as belonging to the type discussed here. However, only in those cases in which there was positive evidence have I classified a language as belonging to the localizing/non-localizing type. In most cases the expression of possessive predications by means of an expression format different from that used for localizing predications constitutes the positive evidence for such an analysis.

9.1.6. Equative versus non-equative

Another, rather infrequent, type of partitioning is that in which equative predications receive a morphological treatment different from that used for non-equative predications, particularly those based on adjectival predicates. A general representation of this type of partitioning is given in Figure 54. There are two languages in the sample which have this kind of system. Outside the sample similar distributions may be found in the Ibero-Romance languages, in Sranan (Arends 1986), and in several other creole languages (see 10.1). Yessan-Mayo has the system represented in Figure 55. Like the one described in the previous section, this type of distribution is best understood from a diachronic perspective (see 10.1), in the sense that this system represents a second stage, following the localizing versus non-localizing opposition, in the innovation of a copular system. Therefore, it is not surprising to find that, again, the languages having this system are neither flexible nor rigid.

$(ø)_{Loc}$/+Pres			$(x_i)_{Poss}$/+Pres
$(x_i)_{Loc}$/+Pres			
$(x_i)_{Loc}$/-Pres	A/-Pres	N/-Pres	$(x_i)_{Poss}$/-Pres
	(ix_i)		(dx_i)

Figure 54. Equative versus non-equative: Basque, Yessan Mayo.

ti/-			-
ti/-			
ti/ø2	*ti*/ø2	*ti*/ø2	-
	ø2		ø2

Figure 55. Sketch: Yessan-Mayo

9.1.7. Identifying versus non-identifying

There is one language in the sample, Egyptian Arabic, in which all predicable predication types are treated alike but for identifying predications, which have their own combination of expression formats. This pattern may be represented as in Figure 56.

$(ø)_{Loc}$/+Pres			$(x_i)_{Poss}$/+Pres
$(x_i)_{Loc}$/+Pres			
$(x_i)_{Loc}$/-Pres	A/-Pres	N/-Pres	$(x_i)_{Poss}$/-Pres
	(ix_i)		(dx_i)

Figure 56. Identifying versus non-identifying: Egyptian Arabic.

This pattern is again best understood from a diachronic perspective: it is one of several ways in which a formal distinction between equative and localizing predications is created (see 10.2). Egyptian Arabic is, again, neither flexible nor rigid. Its system of non-verbal predication is given in Figure 57.

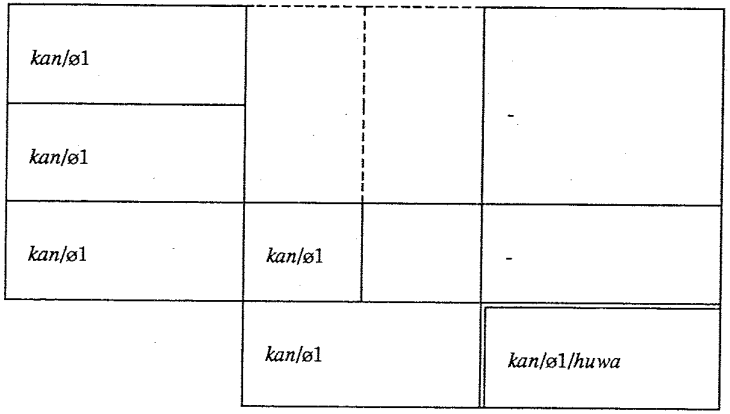

Figure 57. Sketch: Egyptian Arabic

9.2. Discussion

9.2.0. Introduction

At several points in the preceding sections it has become clear that the organization of systems of non-verbal predication in terms of the distribution of expression formats can be related to other properties of the languages concerned. In this section I will try to summarize and interpret these correlations.

As stated in the introduction, the parameters that enter into these correlations are the following: (i) the parts-of-speech system (chapter 4), with its implications for the degree of predicability within the language concerned (chapter 6), (ii) the zero-strategy adopted, if any (chapter 8), and (iii) the distribution of (combinations of) expression patterns within the system of non-verbal predication (this chapter). The first parameter needs some elaboration.

In chapter 4 I gave a classification of seven different parts-of-speech systems, subdividing them into flexible, specialized, and rigid ones. In the present context it may be useful to interpret this threefold distinction in a more restricted sense. Since it is particularly the status of adjectival predicates that appears to be relevant in the present context, the three types of parts-of-speech system may be represented as in Figure 58.

V	N/A		Flexible
V	N	A	Specialized
V	N	-	Rigid

Figure 58. Parts-of-speech systems

In Figure 58 the notions *flexible*, *specialized*, and *rigid* are thus interpreted relative to adjectival predicates. For the purposes of the present chapter, the status of adverbs may be ignored, the basic question being whether a language combines the nominal and adjectival functions in one class of predicates (flexible), has a separate open class of adjectives (specialized), or lacks an open class of adjectival predicates (rigid). In what follows I will use this threefold classification in studying the correlations with other parameters. The relevant data are presented in Table 44. The correlations emerging from this table will be discussed one by one in the following sections.

9.2.1. Rigid languages

The strongest correlation that emerges from Table 44 is that rigid languages all have the equative/localizing expression pattern and use the zero-2 strategy, if they use any zero-strategy at all. This cooccurrence of features can best be understood by taking the parts-of-speech system as the point of departure.

In rigid languages there are two major parts of speech: verbs and nouns. Verbs are tied to predicative function, nouns only occur as heads of term phrases. From a syntactic point of view, there are thus two major types of constituent: predicate phrases with a verbal head, and term phrases with a nominal head. These two types are strictly kept apart: nouns are never used as the head of a predicate phrase, just as verbs are never used as the head of a term phrase.

Suppose a rigid language has no copulas. In such a case there are just two possible nuclear predication types: (i) those based on verbal predicate phrases with term phrases provided with a semantic function as their arguments, and (ii) those in which term phrases are simply juxtaposed. By means of the first type a locative expression can be formed: locative phrases, given their locative semantic function, are suitable as arguments of positional verbs, which may in the course of time come to be used as a copula restricted to localizing predications (see 10.1). By means of the second type an equative predication can be formed, where mere juxtaposition in a zero-2 construction may come to be combined with a discriminating copula.

Table 44. Parts-of-speech systems, zero-strategies, and expression patterns

Language	PoS-system	zero-strategy	Expression pattern
Ket	Flexible	zero-1	Pres/Non-pres
Turkish	Flexible	zero-1	Pres/Non-pres
Quechua, Imbabura	Flexible	zero-2	Pres/Non-pres
Tagálog	Flexible	zero-2	All alike
Ngiyambaa	Flexible	zero-2	All alike
Burushaski	Flexible	—	All alike
Abkhaz	Specialized	zero-1	All alike
Dutch	Specialized	—	All alike
Jamaican Creole	Specialized	zero-1/zero-2	Loc/Non-loc
Ngalakan	Specialized	zero-1	Loc/Non-loc
Babungo	Specialized	zero-2	Loc/Non-loc
Chukchee	Specialized	zero-2	Loc/Non-loc
Nahali	Specialized	—	Loc/Non-loc
Sumerian	Specialized	—	Loc/Non-loc
Yessan-Mayo	Specialized	zero-2	Eq/Non-eq
Basque	Specialized	—	Eq/Non-eq
Arabic, Egyptian	Specialized	zero-1	Id/Non-id
Hungarian	Specialized	zero-1	Rel/Non-rel
Lango	Specialized	zero-1	Rel/Non-rel
Mam	Specialized	zero-1	Rel/Non-rel
Nasioi	Specialized	zero-1	Rel/Non-rel
Pipil	Specialized	zero-1	Rel/Non-rel
Guaraní	Specialized	zero-1/zero-2	Rel/Non-rel
Bambara	Specialized	—	Rel/Non-rel
Yagaria	Rigid	zero-2	Eq/Loc
!Xũ	Rigid	zero-2	Eq/Loc
Chinese, Mandarin	Rigid	zero-2	Eq/Loc
Gilyak	Rigid	zero-2	Eq/Loc
Hixkaryana	Rigid	zero-2	Eq/Loc
Tamil	Rigid	zero-2	Eq/Loc
Thai	Rigid	zero-2	Eq/Loc
Vietnamese	Rigid	zero-2	Eq/Loc
West Greenlandic	Rigid	zero-2	Eq/Loc
Hausa	Rigid	zero-2	Eq/Loc
Krongo	Rigid	—	Eq/Loc
Miao	Rigid	—	Eq/Loc
Navaho	Rigid	—	Eq/Loc

In this way the two non-verbal predication types, the localizing and equative ones, are strictly kept apart in rigid languages, just as verbal predicate phrases and nominal term phrases are strictly kept apart. Now, as I will demonstrate below, adjectival predicates constitute a 'bridge' between equative and localizing predications, in the sense that the same copula may be used in localizing and equative predications only when that same copula is used with adjectival predicates as well; thus, that in none of the rigid languages the same copula is used in both predication types available may be seen as a consequence of the non-predicability of predications based on adjectival predicates, which in turn is a consequence of the rigid parts-of-speech system of the languages concerned.

The absence of the zero-1 strategy in rigid languages is a result of the fact that adjectival predicates (which are here taken to include flexible predicates that may be used in adjectival function, see 4.5.1) serve as the starting point for the application of this strategy (see 8.2.3.1). This observation may be reversed: if a language uses the zero-1 strategy, it has a class of adjectival predicates.

9.2.2. Flexible languages

The second correlation is that flexible languages use only two expression patterns: the presentative vs. non-presentative pattern and the all-alike pattern. Typical of flexible languages is that the various predicate types are not tied to any one particular function, and that they therefore allow all types of non-verbal predicate to be used predicatively. It is therefore not surprising to find that a single expression format is used for predications based on bare, referential, and relational predicates. As suggested above, a subdivision between presentative and non-presentative predications is made only when presentativity cannot be signalled by other means, i.e. articles and/or word order.

If, on the other hand, the all-alike pattern is used in a specialized language, this language is under pressure to adopt alternative expression formats, as the following section will show.

9.2.3. Specialized languages

The third correlation concerns an expression format used in specialized languages. It is within this group of languages that the greatest variety is found with respect to the expression formats chosen. One of these is the relational vs. non-relational type. All languages using this pattern except for Bambara employ the zero-1 strategy. As has already been said in 9.1.1, this is a result of the fact that the relational versus non-relational pattern is one of the patterns predicted by the predicativity hierarchy, which governs the use of the zero-1 strategy.

The main point to be made here is that, unlike flexible languages using the zero-1 strategy, specialized languages using that same strategy apparently prefer to distinguish predications based on relational predicates from all other predication types. In other words, in order for a language to treat relational and non-relational languages on a par, it should have a high degree of flexibility in its parts-of-speech system.

A similar conclusion can be drawn from the fact that specialized languages using the all-alike pattern are under pressure to innovate their copular system, as has been stated earlier. As will be shown in 10.1.1, the first step these languages may take is to gradually introduce a new expression format in localizing predications, resulting in the localizing vs. non-localizing expression pattern that can be observed in several of the specialized languages. The second step in this development, which will be described in 10.1.2, is to introduce this newly created expression format in predications based on adjectival predicates, the result being the equative/non-equative pattern that is exhibited by two of the specialized languages. In a third stage the new expression format may be extended to the remaining predication types, which restores the original all-alike pattern.

Another path of developing new expression formats in an all-alike system, to be described in 10.2, starts at the other end of the chain, by introducing a pronominal copula in identifying predications. In this case the result is again an identifying vs. non-identifying pattern, which may develop into an equative vs. non-equative pattern, and so on.

Specialized languages using a zero-1 strategy and exhibiting a relational versus non-relational expression pattern seem to constitute the most stable set within the group. This might be partly due to the fact that these languages use separate expression formats for localizing and equative predications, a distinction that has shown up as crucial at other places and is particularly relevant in the analysis of rigid languages. Another reason for their (relative) stability may be that the zero-1 strategy, which is used in most of the languages concerned, is used most frequently with bare predicates. Since the zero-1 strategy makes a predicativizing copula superfluous, a localizing copula will not be admitted very easily into the adjectival domain. It is precisely this step that is responsible for the (relative) unstability of specialized languages not using the zero-1 strategy.

9.3. The status of adjectives

A further generalization can be drawn from the data in Table 44: there are no languages in which an expression format that is used in both equative and localizing predications is not used in predications based on adjectival predicates (which are here again taken as including flexible predicates that may be used in adjectival function) as well. In Figure 59 simplified representations of the various expression

patterns of non-verbal predication discussed in this chapter are given. A line indicates to what extent (combinations of) expression formats are shared by localizing, adjectival, and equative predications within these expression patterns.

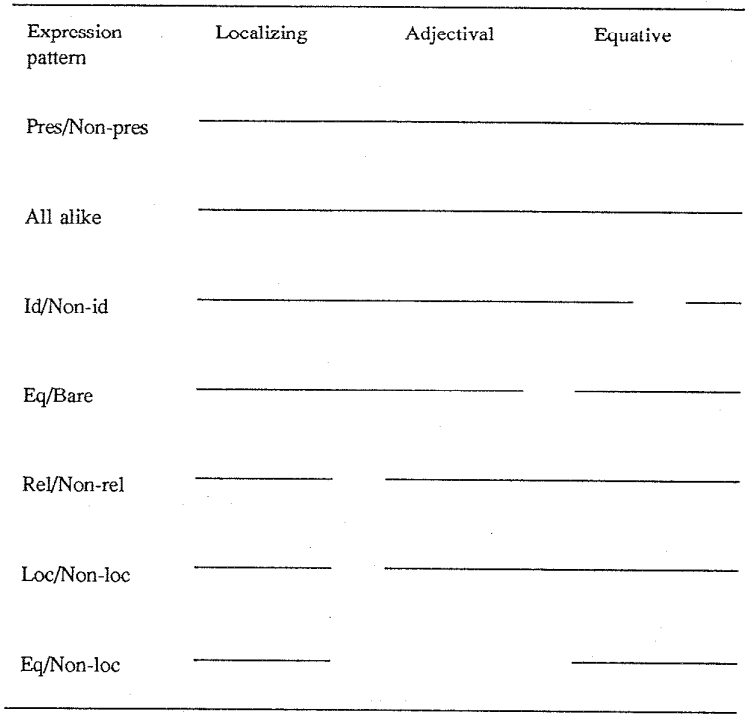

Figure 59. The expression of adjectival predications

In the Pres/Non-pres, All alike, and Id/Non-id patterns the same (combinations of) expression formats are used in localizing and equative predications. In all these patterns the same expression formats are used in predications based on an adjectival predicate as well. In all other patterns equative and localizing predications each have their own (combinations of) expression formats, and predications based on adjectival predicates (i) group with either of these, (ii) have an expression format of their own, or (iii) are non-predicable.

These facts may be interpreted as indicating that adjectival predicates may bridge the gap between equative and localizing predications in those languages in which adjectival predications are predicable, i.e. flexible and specialized languages, whereas in rigid languages their non-predicability turns this gap into an unbridgeable one. The other way round, a stronger conclusion can be drawn: if a language uses the same expression format(s) in equative and localizing predications, it has a class of adjectival predicates.

9.4. Summary

From the above it may be concluded that the expression patterns that are found in rigid and flexible languages are relatively stable and predictable: in flexible languages this is precisely due to their flexibility, which allows them to treat all types of non-verbal predicate on a par; in rigid languages the reverse situation obtains: the severe restrictions such languages impose on the use of verbal and nominal predicates leave no room for variation as to the expression formats selected.

The expression patterns found in specialized languages are, on the contrary, relatively unstable and unpredictable: on the one hand, these languages have many more options as to their expression formats than rigid languages, since they have a higher degree of predicability; on the other, they are not sufficiently flexible to allow all types of predicate to be treated on a par. The relational versus non-relational pattern seems to constitute a relatively stable compromise between these conflicting tendencies.

In all but the flexible languages there is a tendency to separate localizing predications from equative ones: in rigid languages this separation is absolute, whereas in specialized languages using the all-alike pattern there is pressure to innovate the system by either introducing a new expression format in localizing predications (10.1), or in equative predications (10.2). The great variety of expression patterns that can be found in specialized languages is a result of this pressure.

The predicability of predications based on bare predicates, particularly adjectives, plays a crucial role, particularly in specialized languages. This predication type constitutes a bridge between localizing and equative predications, thus contributing to the emergence of the disfavoured situation in which a single expression format is used in both predication types. It furthermore serves as the starting point of the application of the zero-1 strategy, which explains the absence of this strategy in rigid languages.